



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

April 13, 2017

Steven W. Rynders, PhD
VP R&D/Technical Services
Thatcher Group, Inc.
1905 Fortune Rd.
Salt Lake City, Utah 84104

Subject: Label and CSF Amendment –DOT-related label amendment statements and a revised Basic Confidential Statement of Formula (CSF)
Product Name: LIQUID CHLORINE
EPA Registration Number: 9768-21
Application Date: December 2, 2016 (Label)/February 23, 2017 (CSF)
Decision Number: 524800 (Label)/526839 (CSF)

Dear Dr. Rynders:

The amended label and CSF referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Please note that the record for this product currently contains the following CSF:

- Basic CSF dated 02/17/2017

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process.

Page 2 of 2
EPA Reg. No. 9768-21
Decision No. 524800 (Label)/526839 (CSF)

Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Melanie Bolden by phone at (703) 347-0165, or via email at Bolden.Melanie@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Wanda G. Fuller, for". The signature is written in a cursive style.

Demson Fuller, Product Manager 32
Regulatory Management Branch II
Antimicrobials Division (7510P)
Office of Pesticide Programs

Enclosure

CHLORINE GAS
CHLORINE LIQUEFIED GAS UNDER PRESSURE
 ACTIVE INGREDIENT: Chlorine.....99.5%
 OTHER Ingredients0.5%
 Total.....100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER



ACCEPTED POISON

04/13/2017

FATAL IF INHALED
LIQUID CAUSES SEVERE BURNS Insecticide, Fungicide
 and Repellent. Values determined for the pesticide registered under
PRECAUTIONARY STATEMENTS

First Aid EPA Reg. No. 9768-21

If Inhaled: Remove victim to fresh air. If not breathing, give artificial respiration, call 911. Get medical attention. Call a poison control center or doctor immediately for treatment advice.

If in Eyes: Hold eyelids open and flush with a steady, gentle stream of water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice.

If on Skin or Clothing: Wash with plenty of soap and water for 15-20 minutes while removing contaminated clothing and shoes. Call a poison control center or doctor for treatment advice.

Note to Physician: Development of pulmonary edema may be delayed 48-72 hours.
Hazard to Humans and Domestic Animals

DANGER: Fatal if inhaled or absorbed through skin. Corrosive. Causes irreversible eye damage and skin burns. Do not breathe vapors or get in eyes, on skin or clothing. Wear goggles, protective clothing and rubber gloves as described below. Wash hands thoroughly with soap and water after handling and before eating, drinking, using tobacco and using toilet. Remove contaminated clothing and wash clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Personal Protective Equipment: Handlers must wear long-sleeved shirts, long pants, shoes, and socks. Under normal use-conditions, no protective eyewear, respirator, or gloves are required. However, in case of a spill or leak, handlers must wear chemical-resistant gloves (such as nitrile or butyl) and a full-face canister-style (gas mask) respirator with a canister approved for chlorine (MSHA/NIOSH approval number prefix TC-14G) OR a self-contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F). Since there is always the possibility of a spill or leak, gloves and a respirator of a type specified above must be available and are required for anyone entering into an affected area in the event of a leak or spill.

In Case of Spill or Leakage: Under normal use-conditions, no protective eyewear, respirator, or gloves are required. However, in case of a spill or leak, handlers must wear chemical-resistant gloves (such as nitrile or butyl) and a full-face canister-style (gas mask) respirator with a canister approved for chlorine (MSHA/NIOSH approval number prefix TC-14G) or a self contained breathing apparatus (SCBA) (MSHA/NIOSH approval number prefix TC-13F). Since there is always the possibility of a spill or leak, gloves and a respirator of a type specified above must be available and are required for anyone entering into an affected area in the event of a leak or spill.

ENVIRONMENTAL HAZARDS: This pesticide is toxic or highly toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your state water board or regional office of the EPA.

PHYSICAL & CHEMICAL HAZARDS: Chlorine is a non-flammable gas, liquefied, under pressure. Do not drop container. Do not heat container. Keep away from intense heat or open sunlight. Corrosive to most metals in the presence of moisture.

DIRECTION FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Refer to Chlorine Manual published by the Chlorine Institute Inc. for instructions on the required product use and safety procedures. Before working with this product, handlers must be trained how to appropriately use respirators that conform to OSHA requirements (described in 29CFR Part 1910.134) and how to appropriately handle and use chlorine. This product, including dispensing equipment, must be handled and used in accordance with the practices specified by all applicable product labeling and the appropriate Chlorine Institute Pamphlet. To contact the Chlorine Institute, call (703) 741-5760 or visit its website at www.chlorineinstitute.org. Use only in well ventilated areas.

Chlorine Manual.....CI Pamphlet #1	Railcar Handling..... CI Pamphlet #66
Piping Systems.....CI Pamphlet #6	Cylinders at Swimming Pools..... CI Pamphlet #82
Chlorine Packaging Plants.....CI Pamphlet #17	Potable Water Treatment CI Pamphlet #155
Cargo Tank HandlingCI Pamphlet #49	Wastewater Treatment..... CI Pamphlet #155
Emergency Response.....CI Pamphlet #64	Personal Protective Equipment.....CI Pamphlet #65

For use as a disinfectant and/or algicide from larger stationary cylinders (1-ton and 150 lb.) by experienced personnel only, in municipal water supplies, sewage and waste management plants, and in commercial and industrial swimming pools, in accordance with applicable local, state and federal regulations. The registrant is solely responsible for the safety of the servicing equipment used with this pesticide, and for the repackaging of this gas from larger containers into portable cylinders. Each repackager must obtain his own EPA Registration Number for this pesticide for this use, and his own EPA Establishment Number from the EPA. Repackers may only dispense this product to portable containers that are appropriately labeled.

STORAGE and DISPOSAL

STORAGE: Store cylinders and ton containers in a dry area away from sources of heat and protected from direct sunlight and precipitation. Do not store in excessive heat. Segregate chlorine containers from other compressed gases, and never store near hydrocarbons, finely divided metals such as filing and granules, turpentine, ether, anhydrous ammonia, or other flammable materials. All storage containers and cylinders must have weather resistant label and must not be accessible to the general public. Do not drop container. If container is damaged or leaking, refer to procedures in the Chlorine manual and/or notify supplier immediately. Do not contaminate water, food, or feed by storage or disposal. Pesticide waters are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate in a violation of Federal Law.

LEAK PROCEDURE: Make daily inspections for leaks. Stop a leak at once, since it will become worse with time. In case of a leak, evacuate everyone from the immediate area. For entry into affected area to correct problem, wear personal protective equipment (including prescribed respirators) specified in the Hazards to human section of this labeling. When possible, move leaking or damaged cylinders outdoors or to an isolated location. Observe strict safety precautions. Work upwind, if possible. Allow any liquid to evaporate. Only correctly trained and PPE-equipped handlers are permitted to perform such cleanup. Do not permit entry into leak area by any other person until the chlorine has completely dispersed.

DISPOSAL OF CONTAINER: Container is returnable and must be properly identified with return tag and returned as promptly as possible to supplier according to prescribed instructions and practices in the Chlorine Institute Manual. All valves must be closed tight and closures or caps secured. It is illegal to ship a leaking chlorine container.

CHLORINE IN CONTAINERS

CONNECTING: Use 500 psig copper tubing fitted with special adapters to connect container to piping system. To connect line to container, remove valve protection cap and valve outlet cap. Then use wrench to attach tubing to valve with yoke. Use new gasket supplied with container each time connection is made. Make sure connections are tight. Check for leaks with ammonia vapor. Never use standard pipe fittings.

VALVE OPERATIONS: Turn stem one full turn counter-clockwise to open valve. Don't use container valve to regulate the chlorine flow. Use of valve for flow-control may wear valve seat so that it cannot be tightly closed. NEVER FORCE THE VALVE STEM. Hit wrench handle with the heel of hand to loosen a stuck valve stem. NEVER USE A HAMMER OR OTHER IMPLEMENTS FOR THIS PURPOSE. Packing nut may be loosened slightly to relieve tight stem, but retighten promptly to avoid leaks.

DISCONNECTING: Close valve, test valve for leaks, apply valve outlet cap with gasket and protective hood. Plug or cap the open end of the chlorine line immediately to keep out moisture.

THATCHER GROUP, INC.
 1905 FORTUNE ROAD
 SALT LAKE CITY, UTAH 84104

EPA Reg. No. 9768-21
 EPA Est. No 9768-UT-1
 801-972-4587

CHLORINE **RQ**
LIQUEFIED GAS UNDER PRESSURE **UN1017**



**INHALATION
HAZARD**

2



CORROSIVE

8



OXIDIZER

5.1

Cyl. No. Gross Tare Net

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